SAR ANALOG-TO-DIGITAL CONVERTER WITH ABORT FUNCTION

ABSTRACT OF THE DISCLOSURE

SAR analog-to-digital converter with abort function. A method for increasing the throughput of a data converter decision is disclosed. First, a data conversion operation is initiated to convert analog signals on an analog input on a data converter to digital data by sampling the analog signals on the analog signal input and then converting the sampled analog signals to digital data with a predetermined data conversion algorithm in a data conversion operation. The digital output of the data converter is compared to a threshold voltage value. When the output of the data converter is determined by the step of comparing to meet a predetermined relationship relative to the threshold voltage, the data conversion operation is terminated prior to the complete execution of the data conversion operation on the sampled analog signals.